B.S. Biology (60 credits) 2023 – 2024

	Course No.	Course Title	Credits	Co/Pre-Reqs	Year / Semester Taken
❑	BIOL 220	General Biology I (with lab)	4	Co-Req: WRIT 101 & MATH 141; or permission of department	
❑	BIOL 222	General Biology II (with lab)	4	Pre-Req: BIOL 220; or permission of department	
❑	BIOL 315	Cellular and Molecular Biology (with lab)	4	Pre-Req: BIOL 220, BIOL 222 and CHEM 233/234; or permission of department	
❑	BIOL 251	Laboratory Research Methods	2	Pre-Req: BIOL 220 & MATH 141 or higher	
❑	CHEM 233	General Chemistry I	3	Co-Req: MATH 141 or 210 or exemption, & CHEM 234; or permission of department	
❑	CHEM 234	General Chemistry I: Laboratory *(required to take concurrently with CHEM 233)*	1	Co-Req: CHEM 233	
❑	CHEM 235	General Chemistry II	3	Pre-Req: CHEM 233/234; Co-req: CHEM 236 & MATH 141 or 210 or exemption	
❑	CHEM 236	General Chemistry II: Laboratory *(required to take concurrently with CHEM 235)*	1	Co-Req: CHEM 235	
❑	MATH 210	Calculus I	3	Pre-Req: MATH 141 or permission of department	
	Notes: B.S. Biology majors should NOT take MATH 113. Students are required to take MATH courses up to and <u>including</u> MATH 210. Depending on mathematical background, Biology majors should start at an appropriate place in the mathematics sequence. See Catalogue for more information				
❑	PHYS 261	General Physics I (with lab)	4	Pre-Req: MATH 141 or exemption	
❑	PHYS 262	General Physics II (with lab)	4	Pre-Req: PHYS 261	
❑	CHEM 317	Organic Chemistry I	3	Pre-Req: CHEM 235/236 Co-Req: CHEM 318	
❑	CHEM 318	Organic Chemistry I: Laboratory *(required to take concurrently with CHEM 317)*	2	Co-Req: CHEM 317	
❑	CHEM 319	Organic Chemistry II	3	Pre-Req: CHEM 317/318 Co-Req: CHEM 320	
❑	CHEM 320	Organic Chemistry II: Laboratory *(required to take concurrently with CHEM 319)*	2	Pre-Req: CHEM 317/318, Co-Req: CHEM 319	
❑	BIOL 320	Microbiology (with lab)	4	Pre-Req: BIOL 240	
❑	BIOL 329	Physiology (with lab)	4	Pre-Req: WRIT 102 or WRIT 201, BIOL 220 & CHEM 235/236	
❑	BIOL 425	Genetics	4	Pre-Req: WRIT 102 or WRIT 201, BIOL 220/ 222/315, & CHEM 317/318 or BIOL 340	
❑	BIOL/CHEM 441	Biochemistry	4	Pre-Req: WRIT 102 or WRIT 201, BIOL 220, 222, & CHEM 319/320	
❑	BIOL 490	Senior Seminar	1	Pre-Req: BIOL/CHEM 441 or BIOL 425	
B.S. Biology Major			**60**		

Electives (14-18 credits)

	Course No.	Course Title	Credits	Year/ Semester Taken
❑				
❑				
❑				
❑				
❑				
❑				
Total Number of Credits Required for Graduation			**120**	

DIVISION OF THE SCIENCES
8 Semester Academic Plan
B.S. BIOLOGY

(Note: Courses highlighted in red/bolded should be taken in the semester indicated)

Freshman Year- Review your degree requirements; consider adding a minor			
Fall:		**Spring:**	
NYC Seminar (DS course)	3	**WRIT 101 Writing Seminar or WRIT 201**	3
MATH 141 Precalculus I	3	**BIOL 222 General Biology II**	4
BIOL 220 General Biology I	4	**CHEM 235 General Chemistry II**	3
CHEM 233 General Chemistry I	3	**CHEM 236 General Chemistry II Lab**	1
CHEM 234 General Chemistry I Lab	1	DS Course	3
Total	**14**	**Total**	**14**
Sophomore Year - Begin to explore internship or study abroad opportunities			
Fall:		**Spring:**	
WRIT 102 Writing Seminar II (or elective course if WRIT 201 was taken)	3	DS Course	3
BIOL 251 Laboratory Research Methods	**2**	DS Course	3
MATH 210 Calculus	3	**BIOL 315 Cellular & Molecular Biology**	4
CHEM 317 Organic Chemistry I	3	**CHEM 319 Organic Chemistry II**	3
CHEM 318 Organic Chemistry I Lab	2	**CHEM 320 Organic Chemistry II Lab**	2
DS Course	3		
Total	**16**	**Total**	**15**
Junior Year- Meet with Career Services or your Advisor to begin exploring graduate school and/or job market opportunities			
Fall:		**Spring:**	
AIP Course	3	AIP Course	3
AIP course	3	AIP Course	3
****BIOL/CHEM 441 Biochemistry** or **BIOL 329 Physiology**	4	****BIOL 425 Genetics** or **BIOL 320 Microbiology**	4
PHYS 261 General Physics I	4	**PHYS 262 General Physics II**	4
Total	**16**	**Total**	**14**
Senior Year- Review your graduation requirements; begin applying for jobs and/or graduate school			
Fall:		**Spring:**	
AIP Course	3	AIP Course	3
****BIOL/CHEM 441 Biochemistry** or **BIOL 329 Physiology**	4	****BIOL 425 Genetics** or **BIOL 320 Microbiology**	4
*Elective/Science Research/Internship	3	**BIOL 490 Senior Seminar**	1
*Elective/Science Research	3	*Elective/Science Research	3
*Elective/Science Research	3	*Elective/Science Research	3
Total	**16**	**Total**	**14**

Important Notes:

This plan may be subject to change, due to curriculum changes, course availability or advisor modification.

- *Science Research courses (BIOL/CHEM/PHYS 297, 397, 497) are strongly recommended as elective credits.
- **BIOL 320 and 329 are offered in alternating years, as are BIOL 441, 425 and BIOL 490.